



## Animal Cannabis Studies

Animal cannabis studies show that daily cannabis use could permanently alter serotonin and norepinephrine levels in the brain. This can raise the risk of depression and anxiety.

There is some evidence that cannabinoids could be used as an antidepressant if removed from the psychoactive compound THC. Cannabis is ineffective for depression treatment because of the intoxicating effects of THC. Additionally, overuse of cannabis can permanently alter how the body processes its naturally occurring mood regulators, like serotonin. These effects are intensified because the brain of an adolescent is still developing.

### Research In Action

Some teens come to [treatment](#) after “self medicating” for anxiety or depression with marijuana. Marijuana is not a proven remedy for either of these conditions, and we do have evidence that long-term exposure to frequent marijuana use can “rewire” the brain and make it more susceptible to depression and anxiety. Teens should also be aware that using marijuana while on many medications designed to help depression and anxiety can cause moderate to severe side effects.